

Exelon Nuclear Peach Bottom Atomic Power Station 1848 Lay Road Delta, PA 17314-9032 Telephone 717.456.7014 www.exeloncorp.com Nuclear

50-277/278

Mr. Sean Furjanic
Pennsylvania Department of Environmental Protection
Water Quality Management
909 Elmerton Avenue
Harrisburg, PA 17110-8200

May 15, 2002

Subject: Request for Chemical Use Approval NPDES Permit PA0009733

Dear Mr. Furjanic:

Peach Bottom Atomic Power Station, NPDES Permit PA0009733, is requesting the addition of two chemicals to the approved chemical additive list. The two chemicals are Polyfloc AP1120 and Polyfloc PC1195. The Material Safety Data Sheets are attached. BetzDearborn Inc, 4636 Somerton Rd., Trevose, PA 19053 manufactures the chemicals.

The chemicals are coagulants that will be added to the Phase Separators in the Radwaste Treatment System. The phase separators receive input from the Backwash Receiving Tank. The Backwash Receiving Tank receives input from the backwash of the Filter/Demineralizer System filters. These chemicals will be used to aid in the settling of the resin and insoluble iron. The improved settling of the solids will reduce the number of times the Radwaste Processing Filters need to be backwashed reducing the amount of waste generated during the year. The water is decanted to the head of the Radwaste Treatment System and the solids are dewatered and sent to an NRC approved radwaste burial site. The Radwaste Treatment System consists of a filter and a deep bed demineralizer. The majority of the treated water is reused in the plant. When water is discharged into the Susquehanna River, it is discharged in batches of 25,000 gallons with a typical dilution ratio of 4.67E-5.

Initial laboratory tests indicate the optimum, effective concentration to be in the range of 0.5 to 1.5 parts per million (ppm) of each additive. This equates to an annual consumption rate of 58.4 pounds per additive and a daily consumption rate of 0.16 pounds per additive.

Subject to State approval, Peach Bottom intends to commence treatment using these chemicals on June 3, 2002.

If you have any questions on this matter please feel free to contact Mr. Tracy Siglin at 610-765-5904 or Ms. Michele Magness at 717-456-4532. Thank you for your cooperation.

Sincerely:

Mr. Gordon L. Johnston Plant Manager, PBAPS

JUS Mun IWS/MEM:tlm Coo

Cc: H. J. Miller, Administrator, Region I, USNRC with attachments

A. C. McMurtray, USNRC Senior Resident Inspector, PBAPS with attachments

A.M. Arcilla without attachments

D.M. Jordan with attachments

M.E. Magness without attachments

T.J. Siglin with attachments

US NRC Document Control Desk with attachments

CCN 02-14044

APPROVED	CML Product Information Sheet	ACTIVE Page 1 1100-444
Product	Klaraid PC1195	
Manufacturer	BETZDEARBORN INC. 4636 SOMERTON ROAD TREVOSE PA 19053 (215)355-3300 (800)877-1940 Covershee	et Rev. Date: 04/22/2002
Classification	(Blue) Database	Add Date: 04/22/2002
Product Comments	Avoid strong oxidizers - New Item 04/22/02 PBAPS BTW - See A/R#	± 1365743
Product Category	SYSTEM ADDITIVES, ANTIFREEZE, CORROSION INHIBITORS, R	RESINS
Product Label	1100-444	
Storeroom Code	116-17912	
Storage Zone	GENERAL	
Hazard Codes: I	Health> 1 Flammability> 1 Reactivity> 1 N	MSDS Date: 05/22/2000
Hazardous Ingredie	nts List (Section 2 of the MSDS)	
Ingredien	CAS#	%Min %Max

FOR INFORMATION ONLY. COMPLETE INFORMATION SHOULD BE OBTAINED FROM THE MSDS.

In case of conflicting information, notify Radwaste/Environmental Group and follow the MSDS.

\*\*\* End of Report \*\*\*

Controlled Materials Program (CMP)

**Hazardous Category Codes** 

## Effective Date

		1
	PORC	NO
	SQR	YES
ı	NQA	NO
	50.59	NO
1	Resp. Mgr.	YES

CONTROLLED MATERIAL USE CLASSIFICATION REQUEST
One-Time Exemption Permanent Revision Re-evaluation CMP# 100-0444 Received Date (By Chemical/Hazmat Coordinator ):
SECTION A TO BE COMPLETED BY THE MATERIAL REQUESTER
Product Location: Date Requested: 4-12-02 Date Needed: 4-16-02
Inventory Parts Catalogue No. (IPC#): 116-17912 Requested Expiration Date: 16-16-17912
Material Safety Data Sheet (MSDS) Date: 5-22-2000
Product Name: Klaraid PC1195
Manufacturer: Betz Dearborn, Division of Hercules Inc.
Mfg. Address: 4636 Somerton Rd, Trevose, PA 19053
Mfg. Phone: 215-355-3300 Emergency Phone: 800-877-1940
Mfg. Phone: 215-355-3300 Emergency Phone: 800-877-1940  Planned Use/Material Type: Radwaste Polymer - Radwaste Phuse Separator
System/Equipment:
Usage Amount: Critical Systems ( Y/N/NA ):
Requester/Section Name: Michele Magness Requester's Phone: 4532
Mail Code: PS 2-1 Vendor Required (Y/N):
New Product Justification: (USE AS A CLASS I USE)
, /
SECTION B  TO BE COMPLETED BY CMP MANAGEMENT  Health Rating:   Reactivity Rating:   Reactivit
Storage:  General Acid Reactive/Oxidizer Compressed Gas  Flammable Base Combustible Liquid
Health Hazard (Y/N): N Disposal Restricted (Y/N): N Material Category: 1100  Incompatibilities With: (check one)  1-Acids 2-Bases 3-Flammables 4-Oxidizers 9-All other materials  Material Approved (Y/N) YES Reviewer: 8.7.0000 Date: 41002
SECTION C
TO BE COMPLETED BY SITE CHEMISTRY/Chemical/Hazmat Coordinator_
Controlled Material Classification: (I-V) Chemistry Approval (Y/N): /
Reviewer: ht Ant with Reviewed Date: 04/19/96
Reviewer Comments & Hazard Codes:
Disapproval Comments:
ONE-TIME EXEMPTIONS
Expiration Date: 6 16 62 Expiration
Comments:
Exemption Expiration Notification Closure: Date:



ISSUE DATE: 22-MAY-2000

### MATERIAL SAFETY DATA SHEET

BetzDearborn, Division of Hercules Incorporated 4636 Somerton Road Trevose, PA 19053 Business telephone: (215) 355-3300

**EMERGENCY TELEPHONE (HEALTH/ACCIDENT)** (800) 877-1940 (USA)

## **HMIS RATINGS**

(See Section 16 for additional information)

HEALTH: FLAMMABILITY:

REACTIVITY:

## 1 PRODUCT IDENTIFICATION

PRODUCT NAME:

KLARAID PC1195

PRODUCT APPLICATION AREA:

COAGULANT.

## 2 COMPOSITION / INFORMATION ON INGREDIENTS

Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation.

### HAZARDOUS INGREDIENTS:

This product is not hazardous as defined by OSHA regulations.

No component is considered to be a carcinogen by the National Toxicology Program, the International Agency for Research on Cancer, or the Occupational Safety and Health Administration at OSHA thresholds for carcinogens.

### 3 HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

### CAUTION

Non-hazardous to skin. May cause moderate irritation to the eyes. Mists/aerosols may cause irritation to upper respiratory tract.

DOT hazard is not applicable Emergency Response Guide is not applicable Odor: Amine; Appearance: Colorless To Yellow, Liquid

Fire fighters should wear positive pressure self-contained breathing

apparatus(full face-piece type). Proper fire-extinguishing media: dry chemical/CO2/foam or water--slippery condition; use sand/grit.

#### POTENTIAL HEALTH EFFECTS

#### ACUTE SKIN EFFECTS:

Primary route of exposure; Non-hazardous to skin.

#### ACUTE EYE EFFECTS:

May cause moderate irritation to the eyes.

#### ACUTE RESPIRATORY EFFECTS:

Mists/aerosols may cause irritation to upper respiratory tract.

#### INGESTION EFFECTS:

May cause slight gastrointestinal irritation.

#### TARGET ORGANS:

No evidence of potential chronic effects.

### MEDICAL CONDITIONS AGGRAVATED:

Not known.

#### SYMPTOMS OF EXPOSURE:

May cause redness or itching of skin, irritation, and/or tearing of eyes (direct contact).

### 4 FIRST AID MEASURES

### SKIN CONTACT:

Wash thoroughly with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

#### EYE CONTACT:

Remove contact lenses. Hold eyelids apart. Immediately flush eyes with plenty of low-pressure water for at least 15 minutes. Get immediate medical attention.

### INHALATION:

Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get immediate medical attention.

#### INGESTION:

Do not feed anything by mouth to an unconscious or convulsive victim. Do not induce vomiting. Immediately contact physician. Dilute contents of stomach using 3-4 glasses milk or water.

#### NOTES TO PHYSICIANS:

No special instructions

## 5 FIRE FIGHTING MEASURES

### FIRE FIGHTING INSTRUCTIONS:

Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).

### EXTINGUISHING MEDIA:

dry chemical/CO2/foam or water--slippery condition; use sand/grit. HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal decomposition (destructive fires) yields elemental oxides. FLASH POINT:

> 200F > 93C P-M(CC)

## 6 ACCIDENTAL RELEASE MEASURES

#### PROTECTION AND SPILL CONTAINMENT:

Ventilate area. Use specified protective equipment. Contain and absorb on absorbent material. Place in waste disposal container. Flush area with water. Wet area may be slippery. Spread sand/grit.

#### DISPOSAL INSTRUCTIONS:

Water contaminated with this product may be sent to a sanitary sewer treatment facility, in accordance with any local agreement, a permitted waste treatment facility or discharged under a permit. Product as is - Incinerate or land dispose in an approved landfill.

### 7 HANDLING & STORAGE

#### HANDLING:

Normal chemical handling.

#### STORAGE:

Keep containers closed when not in use. Protect from freezing.

### 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

#### EXPOSURE LIMITS

This product is not hazardous as defined by OSHA regulations.

#### ENGINEERING CONTROLS:

adequate ventilation

### PERSONAL PROTECTIVE EQUIPMENT:

Use protective equipment in accordance with 29CFR 1910 Subpart I RESPIRATORY PROTECTION:

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE.
USE AIR PURIFYING RESPIRATORS WITHIN USE LIMITATIONS ASSOCIATED WITH THE EQUIPMENT OR ELSE USE SUPPLIED AIR-RESPIRATORS.
If air-purifying respirator use is appropriate, use a respirator with dust/mist filters.

#### SKIN PROTECTION:

Use of gloves made of rubber or synthetic material is optional. Wash off after each use. Replace as necessary. **EYE PROTECTION:** 

splash proof chemical goggles

## 9 PHYSICAL & CHEMICAL PROPERTIES

Specific Grav. (70F, 21C) 1.152	Vapor Pressure (mmHG)	~ 18.0
Freeze Point (F) 5	Vapor Density (air=1)	< 1.00
Freeze Point (C) -15		
Viscosity(cps 70F,21C) 4100	% Solubility (water)	100.0

Odor Amine

Appearance Colorless To Yellow

Physical State Liquid

Flash Point P-M(CC) > 200F > 93C

pH As Is (approx.) 5.1 Evaporation Rate (Ether=1) < 1.00

NA = not applicable ND = not determined

### 10 STABILITY & REACTIVITY

#### STABILITY:

Stable under normal storage conditions.

HAZARDOUS POLYMERIZATION:

Will not occur.

INCOMPATIBILITIES:

May react with strong oxidizers.

DECOMPOSITION PRODUCTS:

Thermal decomposition (destructive fires) yields elemental oxides. BETZDEARBORN INTERNAL PUMPOUT/CLEANOUT CATEGORIES:

"A"

## 11 TOXICOLOGICAL INFORMATION

Oral LD50 RAT:

7,070 mg/kg

NOTE - Rat oral LD50: 5,000 mg/kg per alternate source

Dermal LD50 RABBIT:

11,500 mg/kg

Inhalation LC50 RAT:

>2,500 ppm/4hr

Skin Irritation Score RABBIT:

0.0

NOTE - Rabbit Irritation Score: 0.1 per alternate source

Eye Irritation Score RABBIT:

17.33

NOTE - Max. score- lhr; completely reversible by day 14; Score 9.0 per alternate study

### 12 ECOLOGICAL INFORMATION

### AOUATIC TOXICOLOGY

Bluegill Sunfish 96 Hour Static Acute Bioassay LC50= .53; No Effect Level= .32 mg/L Daphnia magna 48 Hour Static Acute Bioassay LC50= .57; No Effect Level= .24 mg/L Fathead Minnow 96 Hour Static Renewal Bioassay LC50= .43; No Effect Level= .25 mg/L Rainbow Trout 96 Hour Static Acute Bioassay LC50= .41; No Effect Level= .24 mg/L

#### BIODEGRADATION

BOD-28 (mg/g): 3BOD-5 (mg/g): COD (mg/g): 390 TOC (mg/g): 190

## 13 DISPOSAL CONSIDERATIONS

If this undiluted product is discarded as a waste, the US RCRA hazardous waste identification number is : Not applicable.

Please be advised; however, that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

### 14 TRANSPORT INFORMATION

DOT HAZARD:
UN / NA NUMBER:
DOT EMERGENCY RESPONSE GUIDE #: Not applicable

## 15 REGULATORY INFORMATION

TSCA:

All components of this product are listed in the TSCA inventory.

CERCLA AND/OR SARA REPORTABLE QUANTITY (RQ):

No regulated constituent present at OSHA thresholds

FOOD AND DRUG ADMINISTRATION:

21 CFR 176.170 (components of paper and paperboard in contact with aqueous and fatty foods)

USDA FEDERALLY INSPECTED MEAT AND POULTRY PLANTS:

SEC.L1

SARA SECTION 312 HAZARD CLASS:

Product is non-hazardous under Section 311/312

SARA SECTION 302 CHEMICALS:

No regulated constituent present at OSHA thresholds

SARA SECTION 313 CHEMICALS:

No regulated constituent present at OSHA thresholds

CALIFORNIA REGULATORY INFORMATION

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65) CHEMICALS PRESENT:

No regulated constituent present at OSHA thresholds MICHIGAN REGULATORY INFORMATION

No regulated constituent present at OSHA thresholds

## 16 OTHER INFORMATION

### NFPA/HMIS

#### CODE TRANSLATION

Health	0	Minimal Hazard	
Fire	1	Slight Hazard	
Reactivity	0	Minimal Hazard	
Special	NONE	No special Hazard	
(1) Protective Equipment	В	Goggles, Gloves	

(1) refer to section 8 of MSDS for additional protective equipment recommendations.

#### CHANGE LOG

	S -
MSDS status: 28-JAN-1997	97 97 97 97 99

Page: I Document Name: untitled		•
PEACH BOTTOM INVENTORY PARTS CATALOG COMMAND INPUT===>		GE 4 OF 13 GPLAY MODI
STOCK CODE: 116 17912 STS/LAST UPDT: READY PURCHASE CL: 5 DATE CANCELLED: POOLED INV MGT: COMPUDES CRIPTION: COAGULANT, KLARAID PC1195, 45 LB PAIL,	04/22 ONENT	:/02 RWJ2 FLAG: N
USED FOR : LATER		
======================================		
DESCRIPTION	ID	DATE
		<del></del>
======================================		
D COMMENTE		
C STATUS INDICATOR ROWNG CHANGED FROM Y TO N BY RW.T2	DTMC	DAIE
C STATUS INDICATOR ROUNG CHANGED FROM Y TO N BY RWJ2 C STATUS INDICATOR ISSUE CHANGED FROM Y TO N BY RWJ2	PTMS	04/19/02
W ISSUE ONLY TO CHEMISTRY DEPT	- RWT2	04/22/02
T ISSUE ONLY TO CHEMISTRY DEPT	_ EM:T2	04/22/02
C *** TURN W/O FLAG TO "N" AND ISSUE FLAG TO "N" AFTER EVERY	RWU2	04/22/02
C ORDER AND ISSUE, BRUCE WARGO WANTS TO MAKE SURE ONLY	RWJ2	04/22/02
C CHEMISTRY GETS THIS PRODUCT.  MESSAGE: CMMDS: PF4, H, D, M, Q, I, T, S, V, E1, E2, E3, PF7 OR P	RWJ2	04/22/02
MESSAGE: CMMDS: PF4, H, D, M, Q, I, T, S, V, E1, E2, E3, PF7 OR P	F8/.	• •

Lamar,

This is what I did with the wavehouse So only chemistry can obtain this item. You will need to have a stockcode number For LGS generated.

Hope this Help.

Date: 4/22/02 Time: 1:04:38 PM

APPROVED	CML Product Information Sheet	ACTIVE Page 1 1100-307
Product	POLYFLOC AP1120	
Manufacturer	BETZ LABORATORIES, INC. 4636 SOMERTON ROAD TREVOSE PA 19053- (215)355-3300 (800)877-1940 Coversheet Rev	<b>D</b> . ( )
Classification	l (Blue) Database Add Da	Date: 04/22/2002 te: 03/17/1998
Product Comments	Avoid strong oxidizers. NEW PRODUCT 3/17/98 KCA -LGS. Changed Clafrom V to I as per PB chemistry on 04/22/02 BTW, See AR # 1365743, new MSDS date.	ass Usage ver revised
Product Category	SYSTEM ADDITIVES, ANTIFREEZE, CORROSION INHIBITORS, RESINS	
Product Label	1100-307	
Storeroom Code	116-17911	
Storage Zone	GENERAL	
Hazard Codes: F	lealth> 1 Flammability> 1 Reactivity> 1 MSDS D	Pate: 09/12/2000
Hazardous Ingredien	ts List (Section 2 of the MSDS)	
Ingredien	CAS# %N	⁄lin %Max
·		
Hazardous Category	Codes	

FOR INFORMATION ONLY. COMPLETE INFORMATION SHOULD BE OBTAINED FROM THE MSDS.

In case of conflicting information, notify Radwaste/Environmental Group and follow the MSDS.

\*\*\* End of Report \*\*\*

Controlled Materials Program (CMP)

## Effective Date

		T
	PORC	ИО
	SQR	YES
	NQA	NO
	50.59	NO
ı	Resp. Mgr.	YES

# CONTROLLED MATERIAL USE CLASSIFICATION REQUEST

	CONTRODUDED TRAIDI	CITIE COL CIMIDOTI	TOTITON TELECOPOR
One-Time Exemption CMP# 1100-0307	Permanent P		Re-evaluation  Chemical/Hazmat Coordinator ):
		SECTION A	
	TO BE COMPLE	TED BY THE MATERIAL	REQUESTER
THACHEOTT Lawer	outday og ut 110. (220.)	· <u>· · · · · · · · · · · · · · · · · · </u>	-12-02 Date Needed: 4-16-02
Material Safety	Data Sheet (MSDS) Date OUTTO	te: <u>1712-200</u>	
		ivision of Hercul	es Inc.
	434 Somerton R		
Mfg. Phone: 215	- 355- 3300	Emergency Phone: (	00-877-1940
Planned Use/Mater	rial Type: <u>Radwa</u>	ste Phase Sepo	wotor
System/Equipment:	:	· · · · · · · · · · · · · · · · · · ·	
Usage Amount:		Critical Sys	stems (Y/N/NA):
	n Name: Michell M	agness reg	quester's Phone: 4532
	-21	Vendor Req	uired ( Y/N ):
New Product Justi	ification: <u>(USF AS</u>	A CLASS'T)	
	•	SECTION B	
~	Num TO BE COM	SECTION B SPLETED BY CMP MANAG	SEMENT
	·	ity Rating:	Reactivity Rating:
Storage:  General	Naid 1	Pagativo/Ovidizar	Compressed Gas
Flammable	Base C	Combustible Liquid	Complessed das
		al Restricted (Y/N):	Material Category: 1160
Incompatibilities	With: (check one)	oles 4-Oxidizers	9-All other materials
			Date:
		SECTION C	
TC	D BE COMPLETED BY S	ITE CHEMISTRY/Chemi	cal/Hazmat Coordinator
Controlled Materia	al Classification: (I	(-v)	Chemistry Approval (Y/N):
Reviewer:	WILLWAY		Reviewed Date: 04/19/02
Reviewer Comments	& Hazard Codes:		
Disapproval Commen	nts:		
		TIME EXEMPTIONS	
Expiration Date:	Co-16-07 Bartala		
Comments:		· · · · · · · · · · · · · · · · · · ·	
			Data
Exemption Expiration	on Notification Clos	ure:	Date:



ISSUE DATE: 12-SEP-2000

REACTIVITY:

### MATERIAL SAFETY DATA SHEET

BetzDearborn, Division of Hercules Incorporated 4636 Somerton Road Trevose, PA 19053 Business telephone: (215) 355-3300

EMERGENCY TELEPHONE (HEALTH/ACCIDENT) (800) 877-1940 (USA)

**HMIS RATINGS** 

(See Section 16 for additional information) HEALTH: 0 FLAMMABILITY: 1

## 1 PRODUCT IDENTIFICATION

PRODUCT NAME:

**POLYFLOC AP1120** 

PRODUCT APPLICATION AREA:

FLOCCULANT.

### 2 COMPOSITION / INFORMATION ON INGREDIENTS

Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation.

### HAZARDOUS INGREDIENTS:

This product is not hazardous as defined by OSHA regulations.

No component is considered to be a carcinogen by the National Toxicology Program, the International Agency for Research on Cancer, or the Occupational Safety and Health Administration at OSHA thresholds for carcinogens.

## 3 HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

#### CAUTION

Non-hazardous to skin. Potential eye irritant due to mechanical action only. Dusts may cause irritation to the upper respiratory tract.

DOT hazard is not applicable Emergency Response Guide is not applicable Odor: None; Appearance: Off-White, Powder Fire fighters should wear positive pressure self-contained breathing apparatus(full face-piece type). Proper fire-extinguishing media: dry chemical, carbon dioxide, foam or water

#### POTENTIAL HEALTH EFFECTS

### ACUTE SKIN EFFECTS:

Non-hazardous to skin.

#### ACUTE EYE EFFECTS:

Potential eye irritant due to mechanical action only.

### ACUTE RESPIRATORY EFFECTS:

Primary route of exposure; Dusts may cause irritation to the upper respiratory tract.

#### INGESTION EFFECTS:

No evidence of adverse effects from available information.

#### TARGET ORGANS:

No evidence of potential chronic effects.

#### MEDICAL CONDITIONS AGGRAVATED:

Not known.

## SYMPTOMS OF EXPOSURE:

Nuisance dust.

## 4 FIRST AID MEASURES

#### SKIN CONTACT:

Wash thoroughly with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

### EYE CONTACT:

Remove contact lenses. Hold eyelids apart. Immediately flush eyes with plenty of low-pressure water for at least 15 minutes. Get medical attention if irritation persists after flushing.

#### INHALATION:

If nasal, throat or lung irritation develops - remove to fresh air and get medical attention.

#### INGESTION:

Do not feed anything by mouth to an unconscious or convulsive victim. Do not induce vomiting. Immediately contact physician. Dilute contents of stomach using 3-4 glasses milk or water.

#### NOTES TO PHYSICIANS:

No special instructions

### 5 FIRE FIGHTING MEASURES

### FIRE FIGHTING INSTRUCTIONS:

Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).

### EXTINGUISHING MEDIA:

dry chemical, carbon dioxide, foam or water

### HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal decomposition (destructive fires) yields elemental oxides. FLASH POINT:

> 200F > 93C P-M(CC)

## 6 ACCIDENTAL RELEASE MEASURES

### PROTECTION AND SPILL CONTAINMENT:

Ventilate area. Use specified protective equipment. Contain and absorb on absorbent material. Place in waste disposal container. Flush area with water. Wet area may be slippery. Spread sand/grit.

### DISPOSAL INSTRUCTIONS:

Water contaminated with this product may be sent to a sanitary sewer treatment facility, in accordance with any local agreement, a permitted waste treatment facility or discharged under a permit. Product as is - Incinerate or land dispose in an approved landfill.

## 7 HANDLING & STORAGE

#### HANDLING:

Normal chemical handling.

#### STORAGE:

Keep containers closed when not in use. Keep dry. Store away from oxidizers.

### 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

#### EXPOSURE LIMITS

This product is not hazardous as defined by OSHA regulations.

#### ENGINEERING CONTROLS:

adequate ventilation

### PERSONAL PROTECTIVE EQUIPMENT:

Use protective equipment in accordance with 29CFR 1910 Subpart I RESPIRATORY PROTECTION:

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE.
USE AIR PURIFYING RESPIRATORS WITHIN USE LIMITATIONS ASSOCIATED WITH THE EQUIPMENT OR ELSE USE SUPPLIED AIR-RESPIRATORS.
If air-purifying respirator use is appropriate, use a respirator with dust/mist filters.

#### SKIN PROTECTION:

rubber gloves-- Wash off after each use. Replace as necessary.

#### EYE PROTECTION:

Evaporation Rate (Ether=1)

safety glasses

## 9 PHYSICAL & CHEMICAL PROPERTIES

Density Freeze Point (F) Freeze Point (C)	40.000 lb/ NA NA	/cu. Vapor Pressure (mmHG) Vapor Density (air=1)	< 0.1 < 1.00
Viscosity(cps 70F,21C)	NA	% Solubility (water)	1.0
Odor Appearance Physical State Flash Point P-M pH 0.5% Sol. (approx.)	(CC)	None Off-White Powder > 200F > 93C 7.0	

< 1.00

NA = not applicable ND = not determined

## 10 STABILITY & REACTIVITY

#### STABILITY:

Stable under normal storage conditions.

HAZARDOUS POLYMERIZATION:

Will not occur.

INCOMPATIBILITIES:

May react with strong oxidizers.

DECOMPOSITION PRODUCTS:

Thermal decomposition (destructive fires) yields elemental oxides.

BETZDEARBORN INTERNAL PUMPOUT/CLEANOUT CATEGORIES:

### 11 TOXICOLOGICAL INFORMATION

Oral LD50 RAT:

Dermal LD50 RABBIT:

>2,000 mg/kg>2,000 mg/kg

NOTE - Estimated value

## 12 ECOLOGICAL INFORMATION

#### AQUATIC TOXICOLOGY

Bluegill Sunfish 96 Hour Static Screen 0% Mortality= 300 mg/L

Ceriodaphnia 7 Day Chronic Bioassay

No Effect Level= 10 mg/L

Daphnia magna 48 Hour Static Acute Bioassay

LC50=2975; No Effect Level= 315 mg/L Fathead Minnow 96 Hour Static Acute Bioassay

LC50= 810; 5% Mortality= 315 mg/L

Rainbow Trout 72 Hour Static Screen

0% Mortality= 100 mg/L

### BIODEGRADATION

 $BOD-28 \ (mg/g): 24$ 

BOD-5 (mg/g): 2

COD (mg/g): 400

TOC (mg/g): 240

## 13 DISPOSAL CONSIDERATIONS

If this undiluted product is discarded as a waste, the US RCRA hazardous waste identification number is : Not applicable.

Please be advised; however, that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

## 14 TRANSPORT INFORMATION

DOT HAZARD:

Not Applicable

UN / NA NUMBER:

Not applicable

DOT EMERGENCY RESPONSE GUIDE #: Not applicable

Page: 1 Document Name: untitled		
PEACH BOTTOM INVENTORY PARTS CATALOG COMMAND INPUT===>		GE 4 OF : SPLAY MOI
STOCK CODE: 116 17911 STS/LAST UPDT: REAL PURCHASE CL: 5 DATE CANCELLED: POOLED INV MGT: CODESCRIPTION: FLOCCULENT, POLYFLOC AP1120, 50 LB. BAG	)Y_ 04/2; )MPONENT	2/02 RWJ2 FLAG: N
USED FOR : LATER		<del></del> ,
DESCRIPTION	=======	
DESCRIPTION	ID	DATE
		-
	<del></del>	<del>.</del>
FREEFORM COMMENTS ====================================	-	- <u></u>
P COMMENTS	**	
C RWJ2 CHANGED UOL FROM "PC" TO "BG" AT 13:41:57 04/19/02	PIMS	04/19/02
C REMOVED ECR # W ISSUE ONLY TO CHEMISTRY DEPT	RWJ2	04/19/02
T ISSUE ONLY TO CHEMISTRY DEPT	RWJ2	04/22/02
C *** TURN W/O FLAG TO "N" AND ISSUE FLAG TO "N" AFTER EVER	RWJ2	04/22/02
C ORDER AND ISSUE, BRUCE WARGO WANTS TO MAKE SURE ONLY	TY_ RWJ2	04/22/02
C CHEMISTRY GETS THIS PRODUCT	RW8/2	04/22/02 04/22/02
MESSAGE: POSITION CURSOR WITHIN AREA THAT YOU WISH TO SCROLL	KW0 }	04/22/02

vate: 4/22/02 Time: 9:04:15 AM